2.0 Permit Requirement

E.3. Erosion and Sediment Control

An acceptable erosion and sediment control program shall be maintained in accordance with the Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland. At a minimum, Baltimore County shall:

- a. Address needed program improvements identified during MDE's evaluation of Baltimore County's application for the delegation of erosion and sediment control enforcement authority;
- b. At least three times per year, conduct "responsible personnel" certification classes to educate construction site operators regarding erosion and sediment control compliance. Program activity shall be recorded on MDE's "green card" database and submitted with the Baltimore County annual report; and
- c. Report quarterly information regarding earth disturbances exceeding one acre or more. Quarters shall be based on calendar year and submittals shall be made within 30 days following each quarter. The information shall be specific to the permitting activity for the preceding three months.

2.1 Introduction

The Erosion and Sediment Control Program is implemented by DEPRM's Inspection and Enforcement Section. This program is periodically reviewed by the Maryland Department of the Environment and has consistently met the review requirements. The Erosion and Sediment Control Program contains several components:

- review of building and grading permit applications
- field inspection and enforcement of grading and sediment control regulations
- citizen complaint investigation, and
- training program for certification of responsible personnel.

Baltimore County has been given the authority to enforce sediment control regulations by the State of Maryland. The main function of the Erosion and Sediment Control Program is to reduce pollutant loads from new development and redevelopment during the construction phase. This goal is achieved using sediment control best management practices (BMPs) as specified in the sediment and erosion control plan for each development site. Sediment control plans are required for any construction activity disturbing an area greater than 5,000 square feet. The standard plan for Sediment and Erosion Control is used for residential construction activity disturbing less than 30,000 sq. ft. and all other construction activity disturbing less than 20,000 sq. ft.

2.2 Program Analysis - Plans Review

Currently, Sediment and Erosion Control Plans are reviewed for adequacy by the Baltimore County Soil Conservation District while DEPRM's Stormwater Management Section coordinates

the approval process. The Sediment and Erosion Control Plans are also reviewed by DEPRM's Environmental Impact Review Section to ensure that there is no encroachment on the forest buffers or forest conservation areas that are protected by County regulations.

Each Sediment and Erosion Control Plan is required to have an associated Grading Plan indicating the final topographic contours of the development site. The Grading Plans are reviewed by DEPRM and the Baltimore County Soil Conservation District.

2.3 Program Analysis - Inspection and Enforcement

The Inspection and Enforcement Section maintains records of issued grading permits, conducts routine inspections of active construction sites, and issues correction notices, violation notices, and stop work orders to enforce compliance of sediment and erosion control and grading plans. Prior to the issuance of grading permits, a pre-construction meeting is held at the site. This meeting is attended, at a minimum, by the DEPRM inspector and the construction site foreman. The foreman must be certified through the "responsible personnel in erosion and sediment control" training program which is described in section 2.4. The meeting covers the sequence of operations for the grading involved with the overall site development. This meeting is intended to forestall any future problems.

2.3.1 Grading and Building Permits Issued

Grading permits and building permits are reviewed by DEPRM. Grading Permits are required for any disturbance over 5,000 square feet or for grade changes in existing neighborhoods.

Baltimore County building permits are required for any new construction, additions, or alterations. This Department reviews building permits, to ensure that the final drainage patterns will not impact adjacent properties and that the onsite drainage will direct stormwater away from building structures and to stormwater management facilities. These permits are also reviewed to ensure that they are in compliance with other environmental regulations, such as, Critical Area requirements and Forest Buffer requirements.

During the calendar year 2007, two hundred and twelve (212) grading permits were issued. This represents a slight decrease in the number of grading permits from the previous year. However, there was a significant reduction in the acreage of disturbance from 1,147 acres to 698 acres. This is the lowest acreage since reporting began in 1998. The number of grading permits approved and the acreage of disturbance are displayed by watershed in Table 2-1 and Figure 2-1. Approximately 96 acres representing 13% of the total acreage of disturbance occurred in the drainage areas of the three drinking water reservoir watersheds Prettyboy Reservoir (0.0 acres), Loch Raven (80.2 acres), and Liberty (16.19 acres). This disturbed acreage is the same as last year. These watersheds comprise ~47% of the drainage area in Baltimore County. Baltimore County has been promoting redevelopment of its older communities. This renaissance has finally come to fruition and is apparent by these permit numbers. The watersheds with the greater number of permits are the ones that are within growth areas or contain older existing communities.

Table 2-1: Number of Grading Permits and Acreage of Disturbance by Watershed for 2007.

| Watershed | Number of Permits | Acreage of Disturbance | | |
|-------------------------|---------------------|------------------------|--|--|
| Upper Western Shore | | | | |
| Deer Creek | 1 | 0.1 | | |
| Prettyboy Reservoir | 0 | 0.0 | | |
| Loch Raven Reservoir | 33 | 80.2 | | |
| Lower Gunpowder Falls | 17 | 119.2 | | |
| Little Gunpowder Falls | 3 | 26.6 | | |
| Bird River | 13 | 82.4 | | |
| Gunpowder River | 3 | 5.5 | | |
| Middle River | 17 | 11.9 | | |
| UWS Totals | 87 | 325.9 | | |
| | Patapsco/Back River | | | |
| Liberty Reservoir | 4 | 16.1 | | |
| Patapsco River | 28 | 98.6 | | |
| Gwynns Falls | 24 | 86.8 | | |
| Jones Falls | 20 | 47.0 | | |
| Back River | 32 | 62.2 | | |
| Baltimore Harbor | 17 | 61.4 | | |
| Patapsco/Back R. Totals | 125 | 372.1 | | |
| County Totals | 212 | 698.0 | | |

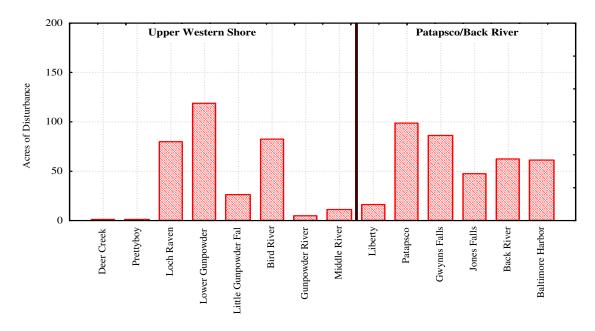


Figure 2-1: Acres of disturbance through approved grading permits by watershed for 2007.

During the calendar year 2007, 1,191 new residential building permits were issued. The distribution of building permits by watershed is displayed in Table 2-2 and Figure 2-2.

As indicated above, Baltimore County has been advocating redevelopment of its older communities. For calendar year 2007, a greater number of permits are located in watersheds with existing development.

Table 2-2: Number of Building Permits by Watershed Approved in 2007.

| Watershed | Number of Permits | | | |
|-----------------------------------|-------------------|--|--|--|
| Upper Western Shore | | | | |
| Deer Creek | 2 | | | |
| Prettyboy Reservoir | 11 | | | |
| Loch Raven Reservoir | 131 | | | |
| Lower Gunpowder Falls | 130 | | | |
| Little Gunpowder Falls | 14 | | | |
| Bird River | 193 | | | |
| Gunpowder River | 15 | | | |
| Middle River | 87 | | | |
| Upper Western Shore Totals | 583 | | | |
| Patapsco/Back R | River | | | |
| Liberty Reservoir | 15 | | | |
| Patapsco River | 131 | | | |
| Gwynns Falls | 120 | | | |
| Jones Falls | 124 | | | |
| Back River | 191 | | | |
| Baltimore Harbor | 27 | | | |
| Patapsco/Back River Totals | 608 | | | |
| County Totals | 1,191 | | | |

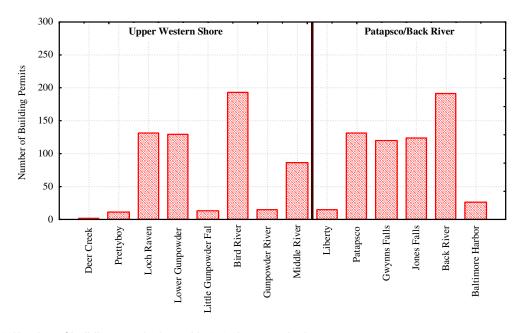


Figure 2-2: Number of building permits issued in 2007 by watershed.

Displayed in Table 2-3 and Figure 2-3 are the trends in building and grading permits, as well as acres of disturbance for a ten-year period. It shows a peak in 1999 followed by a gradual downward trend and then a greater downward trend last year.

| Year | Grading Permits | Acres of Disturbance | Building Permits |
|------|-----------------|----------------------|-------------------------|
| 1998 | 256 | 1,173 | 2,705 |
| 1999 | 364 | 1,115* | 2,747 |
| 2000 | 256 | 1,081 | 2,419 |
| 2001 | 232 | 1,209 | 1,869 |
| 2002 | 216 | 1,093 | 1,915 |
| 2003 | 258 | 916 | 1,708 |
| 2004 | 249 | 905 | 1,731 |
| 2005 | 217 | 1,083 | 2,085 |
| 2006 | 230 | 1,147 | 1,713 |
| 2007 | 212 | 698 | 1,191 |

Table 2-3: Number of Grading and Building Permits by Year

^{*}Excluding a single permit for 6,060 acres of disturbance associated with the Colonial Pipeline maintenance project.

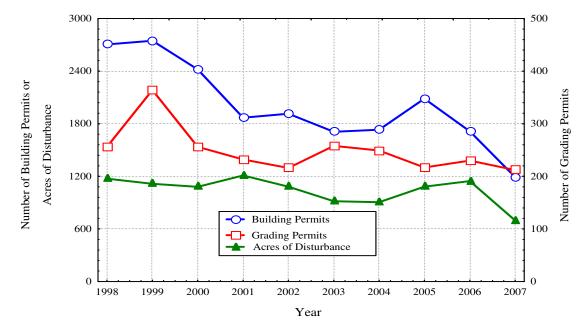


Figure 2-3: Approved Grading and Building Permits for the Period 1998 – 2007.

2.3.2 Inspections, Complaints and Enforcement

After construction begins, an inspector inspects the site an average of once every two weeks during the active constructive phase. Table 2-4 displays the number of inspections by month and type for the calendar year 2007. These inspections are also shown in Figures 2-4 and 2-5. The data are broken down into two categories, enforcement actions and inspections.

In 2007, 1,331 enforcement actions were logged (Table 2-4, last column and Figure 2-4), and 11,462 inspections were logged (Table 2-4, seventh column and Figure 2-5). These numbers represent a slight decrease in comparison with the activities in 2006.

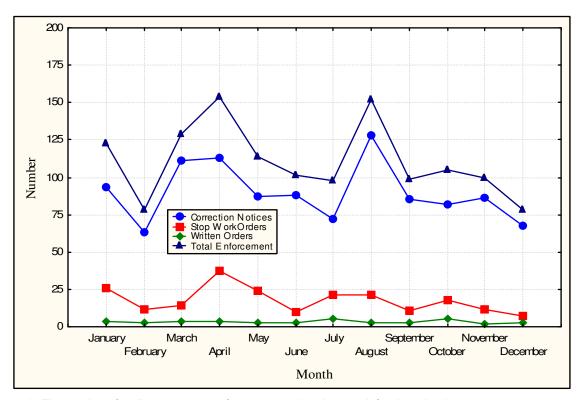


Figure 2-4: The number of sediment control enforcement actions by month for the calendar year 2007.

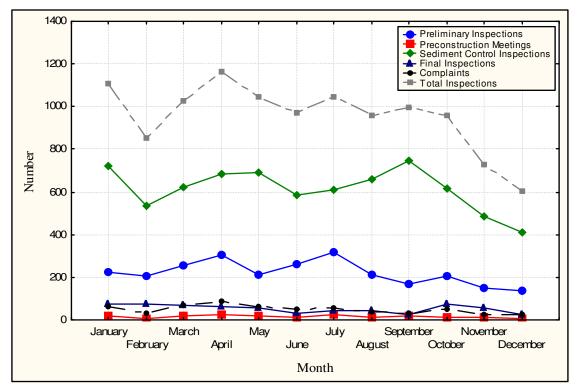


Figure 2-5: Number of sediment control inspections and the total number of inspections by month for the calendar year 2007.

Table 2-4: Sediment Control Inspection Data for 2007

| Month | Prelim. | Pre Constr. | S.C. Inspt. | Final Inspt. | Complaint | Total Inspt. | Correct. Notice | Stop Work Order | Written Orders | Totals Enforce |
|-----------|---------|----------------|-------------|-----------------|-----------|-----------------|--------------------|-----------------------|-------------------|-------------------|
| January | 227 | 21 | 723 | 737 | 64 | 1,108 | 93 | 26 | 4 | 123 |
| February | 208 | 7 | 534 | 72 | 31 | 852 | 63 | 12 | 3 | 78 |
| March | 254 | 17 | 622 | 67 | 69 | 1,029 | 111 | 14 | 4 | 129 |
| April | 306 | 23 | 684 | 63 | 88 | 1,164 | 113 | 37 | 4 | 154 |
| May | 211 | 21 | 689 | 58 | 64 | 1,043 | 87 | 24 | 3 | 114 |
| June | 264 | 13 | 588 | 61 | 47 | 973 | 88 | 10 | 3 | 101 |
| July | 318 | 23 | 607 | 42 | 57 | 1,047 | 72 | 21 | 5 | 98 |
| August | 209 | 11 | 658 | 43 | 40 | 961 | 128 | 21 | 3 | 152 |
| September | 170 | 21 | 748 | 25 | 30 | 994 | 85 | 11 | 3 | 99 |
| October | 207 | 12 | 616 | 73 | 49 | 957 | 82 | 18 | 5 | 105 |
| November | 147 | 11 | 486 | 57 | 27 | 728 | 86 | 12 | 2 | 100 |
| December | 137 | 7 | 410 | 28 | 24 | 606 | 68 | 7 | 3 | 78 |
| Totals | 2658 | 187 | 7,365 | 662 | 590 | 11,462 | 1,076 | 213 | 42 | 1,331 |

Sediment controls are only seventy to ninety percent effective when they are properly installed and maintained. Therefore a successful sediment control inspection and enforcement program is essential for achieving maximum effectiveness.

2.4 Program Analysis - Training Program

Four (4) Responsible Personnel Certification training sessions were held in 2007: February 14, and February 22, March 12, and March 15. One hundred and four (104) people attended these sessions. A list of individuals receiving certification is presented in Appendix 2-1. The training program is offered to construction site operators in Baltimore County on an as-needed basis. Baltimore County maintains an interest list on file and offers the certification class when enrollment requests justify the need.

2.5 Summary

An overall decrease in inspections for fiscal 2007 is contributed to the vacancy of two (2) inspection officer positions.

In the fall of 2007, the Maryland Department of the Environment Water Management Administration conducted an Erosion and Sediment Control Program Evaluation of DEPRM's Erosion and Sediment Control Program. DEPRM's program received good marks in all categories and based on the effectiveness of Baltimore County's program, continued delegation has been extended to June 30, 2010. The letter reaffirming delegation is in Appendix 2-2. Additional changes to the program will be made as necessary. DEPRM will reapply for delegation no later than October 1, 2009.

Appendix 2-1: List of Individuals Receiving Certification

| LAST NAME | FIRST NAME | DATE | CERT NUM |
|-------------|----------------|------------|----------|
| CHRISTENSEN | PETER J. | 02/14/2007 | 28529 |
| WITT | STEVEN P. | 02/14/2007 | 28536 |
| WATSON | JONATHAN C. | 02/14/2007 | 31032 |
| WALLACE | SCOTT C. | 02/14/2007 | 28534 |
| SHREWSBURY | JEFFREY L. | 02/14/2007 | 28533 |
| KLINE | WILLIAM B. | 02/14/2007 | 28532 |
| DERUGGIERO | ANTHONY T. | 02/14/2007 | 28531 |
| BOWERS | RANDALL L. | 02/14/2007 | 28528 |
| COFFMAN | RICHARD D. | 02/14/2007 | 28530 |
| WOODHURST | STEPHEN L. | 02/14/2007 | 28537 |
| СООК | JAN M. | 02/22/2007 | 28547 |
| SAMPLE | TRAVIS D. | 02/22/2007 | 30963 |
| WILCOX | DEWITT G. | 02/22/2007 | 30970 |
| JOHNSON | MAURICE A. | 02/22/2007 | 30957 |
| MARCONI | RICHARD A. | 02/22/2007 | 30958 |
| MYERS | GABRIELLE S. | 02/22/2007 | 30959 |
| PAJAK | JOSHUA A. | 02/22/2007 | 30960 |
| HECKERT | WILLIAM B. | 02/22/2007 | 28555 |
| ROSSMAN | THEODORE L. | 02/22/2007 | 30962 |
| HAWKINS | JASON M. | 02/22/2007 | 28554 |
| SMITH | JOSEPH L. | 02/22/2007 | 30964 |
| TERHUNE | PHILLIP T. | 02/22/2007 | 30965 |
| TRIBETT | KYLE D. | 02/22/2007 | 30965 |
| WHEELER | JEFF W. | 02/22/2007 | 30960 |
| WHITE | JOHN F. | 02/22/2007 | 30967 |
| FISHER | JAMIE L. | | |
| | | 02/22/2007 | 28549 |
| RAGER | CHRISTOPHER M. | 02/22/2007 | 30961 |
| BROSH | MEGAN A. | 02/22/2007 | 28545 |
| ARMSTRONG | CHRIS W. | 02/22/2007 | 28538 |
| BAILEY | DEANNA C. | 02/22/2007 | 28539 |
| BEVARD | STEVE | 02/22/2007 | 28540 |
| BLALOCK | DAN M. | 02/22/2007 | 28541 |
| BOUCHER | ANTHONY B. | 02/22/2007 | 8542 |
| HILDEBRANDT | CHAD M. | 02/22/2007 | 28556 |
| BROGZKOWSKI | JEFFREY | 02/22/2007 | 28544 |
| WOOD | GREGORY N. | 02/22/2007 | 30971 |
| CAMPBELL | JUSTIN M. | 02/22/2007 | 28546 |
| DOYLE | MICHAEL P. | 02/22/2007 | 28548 |
| GENITO | DENNIS | 02/22/2007 | 28550 |
| GEARY | JARED P. | 02/22/2007 | 28551 |
| GOODWIN | DAVID J. | 02/22/2007 | 28552 |
| GRACEY | ROBERT N. | 02/22/2007 | 28553 |
| BOWMAN | JONATHAN D. | 02/22/2007 | 28543 |
| ZECK | JOHN S. | 02/22/2007 | 30972 |
| WICHMAN | RICHARD E. | 02/22/2007 | 30969 |

| LAST NAME | FIRST NAME | DATE | CERT NUM |
|--------------|----------------|------------|----------|
| ZINK | ADAM N. | 03/12/2007 | 31000 |
| SHOEMAKER | TIMOTHY C. | 03/12/2007 | 30993 |
| SHEVLAND | NICHOLAS E. | 03/12/2007 | 30992 |
| MCALLISTER | BILL | 03/12/2007 | 30986 |
| GUTTMAN | DAVID O. | 03/12/2007 | 30981 |
| COX, JR | DARREL E. | 03/12/2007 | 30978 |
| BOSLEY | EDWARD A. | 03/12/2007 | 30975 |
| BURDICK | EDWARD A. | 03/12/2007 | 30977 |
| MEISTER | VANCE E. | 03/12/2007 | 30987 |
| EGLISKIS | MICHAEL J. | 03/12/2007 | 30979 |
| JUDGE | JAMES P. | 03/12/2007 | 30983 |
| WALSKY | PAUL S. | 03/12/2007 | 30997 |
| OLIVER | TOMMY L. | 03/12/2007 | 30989 |
| ROLAND | JOSEPH R. | 03/12/2007 | 30990 |
| SNYDER | MARK F. | 03/12/2007 | 30994 |
| ALLEN | VINCENT T. | 03/12/2007 | 30973 |
| BAILEY | JOE R. | 03/12/2007 | 30974 |
| WIRTANEN | MICHAEL | 03/12/2007 | 30999 |
| MOORE | MARK D. | 03/12/2007 | 30988 |
| MASON, JR | JOSEPH E. | 03/12/2007 | 30985 |
| HOPKINS | DAVID R. | 03/12/2007 | 30982 |
| ALLEN | VINCENT T. | 03/12/2007 | 30973 |
| BRAUN | LOUIS R. | 03/12/2007 | 30976 |
| WENTWORTH | CHRISTOPHER J. | 03/12/2007 | 30998 |
| SOETLE | RICHARD L. | 03/12/2007 | 30995 |
| TWELE | MATTHEW AL | 03/12/2007 | 30996 |
| RYAN | MARY E. | 03/12/2007 | 30991 |
| FELDER | CLARENCE | 03/12/2007 | 30980 |
| ALTMEYER | KEVIN M. | 03/12/2007 | 31001 |
| BAILEY | JOE R. | 03/12/2007 | 30974 |
| BOYER III | DONALD A. | 03/15/2007 | 31005 |
| HARRISON | TIMOTHY J. | 03/15/2007 | 31013 |
| SHEPPERD JR. | DOUGLAS W. | 03/15/2007 | 31027 |
| POWERS | MICHAEL R. | 03/15/2007 | 31025 |
| PETERKIN | RODNEY K. | 03/15/2007 | 31023 |
| MOSKOWSKY | PETER A. | 03/15/2007 | 31022 |
| MCEVOY | DOUG D. | 03/15/2007 | 31021 |
| LEMMON | TYRONE | 03/15/2007 | 31020 |
| LANE | DAVID P. | 03/15/2007 | 31019 |
| KUDRNA | JOSEPH E. | 03/15/2007 | 31018 |
| JOHNSON | JERMAINE L. | 03/15/2007 | 31016 |
| SNYDER | JOHN W. | 03/15/2007 | 31028 |
| HEINLE | DAVID M. | 03/15/2007 | 31014 |
| SEIBEL | ARTHUR W. | 03/15/2007 | 31026 |
| HAMILTON | LAURIE A. | 03/15/2007 | 31012 |
| FRANK | JACOB M. | 03/15/2007 | 31011 |

| LAST NAME | FIRST NAME | DATE | CERT NUM |
|-----------|--------------|------------|----------|
| FONDNAZIC | CHRISTINE M. | 03/15/2007 | 31010 |
| ENSOR | BRYAN R. | 03/15/2007 | 31009 |
| CENIDOZU | DAVID J. | 03/15/2007 | 31008 |
| CAMPBELL | REGINALD | 03/15/2007 | 31006 |
| BOWEN | TRACEY E. | 03/15/2007 | 31004 |
| BLUM | WILBUR P. | 03/15/2007 | 31003 |
| KRAFT | THOMAS R. | 03/15/2007 | 30984 |
| HYMAN | MICHAEL A. | 03/15/2007 | 31015 |
| UNFRIED | MARK C. | 03/15/2007 | 31030 |
| THOMPSON | MARK D. | 03/15/2007 | 31029 |
| BENNETT | TIMOTHY P. | 03/15/2007 | 31002 |
| CARRERAS | FRANCISCO S. | 03/15/2007 | 31007 |
| PISTORIO | JASON C. | 03/15/2007 | 31031 |





MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230 410-537-3000 • 1-800-633-6101

Martin O'Malley, Governor Anthony G. Brown, Lieutenant Governor Shari T. Wilson , Secretary Robert M. Summers, Ph.D., Deputy Secretary

JAN 14 2008

Mr. David A.C. Carroll, Director Department of Environmental Protection and Resource Management Baltimore County Government, Courts Building Towson, Maryland 21204



Dear Mr. Carroll:

The Maryland Department of the Environment, Water Management Administration (MDE/WMA) has completed the review of Baltimore County's application for continued delegation of erosion and sediment control enforcement authority. I would like to thank you and your staff for their assistance during the review process. A copy of our evaluation is attached for your use.

Results of the field inspection of active construction sites found most to be in good condition and in compliance with erosion and sediment control requirements. Therefore, I am pleased to grant your request for continued delegation of erosion and sediment control enforcement authority. This delegation of authority becomes effective July 1, 2008. Continuation beyond June 30, 2010 requires reapplication to MDE by October 1, 2009.

If you have any questions or comments regarding our review, please call me at (410) 537-3567 or have a member of your staff contact Mr. Kenneth L. Pensyl, Sediment, Stormwater, and Dam Safety Program at (410) 537-3543.

Sincerely,

Jay G. Sakai, Director Water Management Administration

Enclosure

cc: Mr. Jim Ensor, District Manager, Baltimore County Soil Conservation District